PROCEEDINGS OF THE NEW YORK ENTO-MOLOGICAL SOCIETY.

MEETING OF MAY 6, 1902.

A regular meeting of the New York Entomological Society was held at the American Museum of Natural History. President Groth in the chair with thirteen members present.

Messrs. Graef, Roberts. Sherman and Southwick were elected active members of the society.

Some discussion was held in reference to an amendment to provide for the office of librarian, and upon motion of Mr. Love, the secretary, and Mr. Joutel were appointed to draft such an amendment to propose at the next regular meeting.

After some discussion the society decided to take some action concerning the loss of Mr. Schaeffer's services to the museum. Mr. Southwick moved that a committee of three be appointed to draft a resolution expressing the regret of the society. The president appointed to serve on that committee Messrs. Love, Earber and Zabriskie. After a few moments' intermission the committee presented the following resolution:

The New York Entomological Society having learned that Mr. Charles Schaeffer is to sever his connection with the American Museum of Natural History, wishes to express its high appreciation of his ability and worth and its regrets that the museum is to lose his services.

Mr. Southwick moved the adoption of the resolution, which was carried and the secretary was instructed to forward a copy to the director of the museum, Mr. H. C. Bumpus.

Mr. Joutel exhibited some colored drawings of an undescribed Limacodid larva and also illustrations of Adoneta spinuloides for purposes of comparison. He called attention to the entirely different dorsal pattern of the two which also differ in color. The new Limacodid larva also had enlarged and extremely elongated horns on the last segment. The horns in the second segment were also much thicker and longer than those on A. spinuloides. The larva may prove to be Monoleuca semifacia of which the larva is unknown at present. As Dr. Dyar, to whom he had given the cocoons, had been unsuccessful in rearing them the larva was still in doubt.

Mr. Beyer made some remarks in his experience in breeding Coleoptera in Lower California. He obtained the best results by placing the infested wood in a box with no additional moisture. He stated that many species which were at present rare in collections, were in reality found to be common when properly bred.

Society adjourned.

MEETING OF MAY 20, 1902.

A regular meeting of the society was held at the American Museum of Natural History, with President Groth in the chair and eleven members present.

The secretary read a communication received from Dr. Bumpus acknowledging the receipt of the society's resolution in reference to Mr. Schaeffer.

The committee appointed to draft an amendment clause to the by-laws to provide for the office of librarian proposed the following amendment:

Article IV shall be amended to include the office of librarian.

Article IX.—It shall be the duty of the librarian to receive and take charge of all books, pamphlets and other publications acquired by the society and to keep a complete record and catalogue of all acquisitions. He shall publish in each journal a list of additions obtained during the previous quarter. He shall keep a record of the copies of the journal used in exchange and held in reserve, and also see that exchanges are regularly received. He shall make an annual report to the society. He shall also attend to such other duties as may be determined by the society.

By motion of Mr. O'Connor the society accepted the report.

There was considerable discussion in reference to the present state of the library and it seemed to be the consensus of opinion that the number of our journals now published could well be reduced.

Mr. Leng exhibited a very fine collection of Cicindelidæ which represents nearly all of the species and varieties to be obtained in the United States and made some remarks on the geographical range of a number of the species. Mr. Leng pointed out that certain species were rare in collections because they occurred only in a limited area. For example, C. hyperborea has been found only at Methy Portage, 500 miles north of the Canadian boundary, C. pervirides only in the Sierra Nevada, California, and C. striga only in Florida. He stated that the Rocky Mountains limited the westward range of many of our species, scutellaris for example or sex-guttata. Many species are confined to the Atlantic sea-board or the Southern States and comparatively few to California. Many extend over a wide area and if their range crosses the Rocky Mountains it seems usually to cross the Sierra Nevada also. He alluded to the distribution of C. longilabris inhabiting all of Canada apparently, Maine, White Mountains, Rocky Mountains and Sierra Nevada; also C. lepida and C. limbata occurring in widely separated regions.

He mentioned the occurrence of *C. rufiventris* in New Jersey in the East Plains, near Brookville, in July. He also spoke of the scarcity of records from West Virginia, Tennessee and Kentucky which seems to indicate that there is an extensive termination.

ritory thereabout which has been insufficiently worked.

In discussing the paper Mr. Schaeffer mentioned having taken a single specimen of *Cicindela unipunctata* at Bronx Park several years ago.

Mr. Joutel stated that he had taken C. scutellaris near Aqueduct, Long Island,

in a very restricted locality.

Mr. Barber then spoke on "The Families of the Aquatic Hemiptera." He showed a few typical specimens to represent the aquatic and subaquatic families of hemiptera that occur in the United States. He briefly stated the family characteristics and mentioned the occurrence of the various representatives of the families in the eastern United States.

Society adjourned.

MEETING OF JUNE 3, 1902.

A regular meeting of the New York Entomological Society was held at the American Museum. President Groth presided with the following members present: Messrs. Barber, Joutel, Love, O'Connor, Schaeffer, Sherman, Torre-Bueno, and Watson.

A communication from Dr. Britton in reference to a grant of \$50.00 for research was read. After some discussion Dr. Love moved that the communication be tabled. Carried.

Mr. Joutel, of the Field Committee, reported that the Jamesburg field meeting in which the society expected to participate, along with other societies, had been abandoned. He also reported on the satisfactory results of the Ramapo meeting and announced the next field trip would be to Little Falls, N. J., on Sunday, June 15.

The amendment to the by laws to provide for the office of librarian, proposed at the last regular meeting of the society, was on motion of Mr. Joutel accepted.

Dr. Love moved that this ammendment be numbered IX, and the succeeding numbers be changed to conform. Carried.

On motion of Dr. Love, Mr. Schaeffer was nominated as librarian. Dr. Love moved that the secretary be impowered to cast the unanimous vote of the society for Mr. Schaeffer as librarian. Carriel. As instructed the secretary cast a unanimous vote for Mr. Schaeffer.

A communication from Mr. Beutenmüller was read in which he advised the society to present to the Congressional Library at Washington a complete set of the JOURNAL. He also announced that the Hubbard and Schwartz collection of Coleoptera was now the property of the U. S. National Museum.

On motion of Dr. Love the society voted to present a set of our JOURNAL to the Congressional Library.

Mr. Torre Bueno then read a paper entitled "Some Preliminary Notes on the Early Stages of Notenecta." Mr. Bueno stated that in one case the female in his aquarium deposited eggs the latter part of March and in another case on the 11th of May. The average period of incubation was thirteen days. He pointed out that the manner in which the eggs were deposited was quite different from the usual account, as he found that the female did not make a slit in the epidermis of the leaf or stem, but merely glued the eggs along the sides in a rather irregular fashion on the surface. One female on May 11th deposited a batch of thirty eggs. He gave a full detailed description of the egg and the young larva up to the second moult. About fifteen days elapsed between emergence of larvæ and first moult, and eleven days between the first and second moult. He stated that he had considerable difficulty in securing the right kind of food for the developing young, and because of their cannibalistic habits he had experienced some trouble in rearing them to the second stage. The eggs and larvæ are Notonecta undulata. Mr. Bueno exhibited some microscopic slides showing the various conditions of eggs and larvæ.

Mr. Schaeffer presented some Coleoptera notes with specimens and made some remarks on the range and habits of a few forms.

MEETING OF JUNE 17, 1902.

A regular meeting of the society was held at the residence of Mr. Louis H. Joutel, 164 East 117th St. Mr. Groth in the chair with the members present: Messrs. Barber, Beyer, Comstock, Davis, Green, Holmes, Joutel, Leng, Love, Münch, Schaeffer and Watson.

On motion of Mr. Barber the society directed the field committee to arrange for an excursion to Jamesburg, N. J., for July 4 to 6.

Moved by Mr. Leng and seconded that the society pay the expenses of one member of the field committee in order that he might visit Jamesburg previous to the meeting and report to the members the sort of accommodations to be obtained. Carried

The field committee reported that only three members attended the field meeting at Singac, N. J., on June 15.

The first paper of the evening was by Mr. Schaeffer "On Some New Myrme-cophilons Collected in Texas by Mr. Brues." Mr. Schaeffer explained the novel way in which Mr. Brues had taken the beetles in ant hills and gave the following list of captures: One new species of silphid, Ptomophagus texanus (n. sp.), Eatonidia wheeleri Was., and Ecitoxemia brevipes Brues.

Mr. Joutel showed some of the larvæ and cocoons of the Japanese Caligula japonica.

Society adjourned.

MEETING OF OCTOBER 7, 1902.

A regular meeting of the New York Entomological Society was held at the American Museum of Natural History. President C. F. Groth presided with eleven members and two visitors present.

Mr. Barber, of the Auditing Committee, reported that the committee had examined the accounts of the treasurer and found them correct.

A communication from Mr. Beutenmüller was read, in which he stated that he took pleasure in turning over to the society all of the books and pamphlets received by him in exchange for the JOURNAL.

Mr. Kearfott introduced and moved the adoption of the following resolution; Resolved that the thanks of the society be extended to Mr. Wm. Beutenmüller for his care and safe keeping of the society's library; and that a copy of these resolutions be transmitted by the secretary to Mr. Beutenmüller. Resolution adopted.

Moved by Dr. Love and seconded, that the librarian prepare a list of all papers and books in the possession of the society, together with a list of m'ssing numbers, in order that the publication committee might revise the exchanges, and report the same to the society as early as possible. Carried.

Mr. Davis spoke about "Some Beetle Remains from a Staten Island Peat Bog." He stated that during the summer of 1899 a small pond in the Moravian Cemetery on Staten Island was drained and the mud and vegetable remains removed and piled along the margin of the pond. This material could be separated into thin sheets, and the vegetable growth of centuries, that had been deposited layer upon layer, could be turned over and examined just as could the leaves of a book. On examining these layers with a lens the elytra of a species *Donacia* were found and also a number of the pupa cases which *Donacia* attach to various water plants. The remains were not sufficiently well preserved to enable him to determine the species. Mr. Davis exhibited a number of these beetle remains just as they were found imbedded in the peat.

Mr Schaeffer said that he wished to put on record the capture of the true queen of the white ant (*Termes flavipes*) at Mosholu this summer. He explained the manner in which he had obtained the queen by chopping into pieces a piece of infested wood. Mr. Schaeffer remarked that Professor L. O. Howard in his "Insect Book" states that the true queen of the white ant has never been found in the United States

He also exhibited both sexes of *Tetranodes nivicollis* of which Mr. Linell, when describing it, had only the male, remarking under the description that it

would be interesting to know if the greatly inflated antennal joints are only peculiar to the male or common to both sexes. Mr. Schaeffer said that possessing both sexes he can add to the description that the female has the same joints simple, like our species of *Euderces* to which *Tetranodes* is closely allied.

He also exhibited a few specimens of the hithertofore unique *Lachnosterna æqualis*. Lec. and also one specimen of *L. exorata* Horn., both from Brownsville, Texas. Of the former only females are known and of the latter only males and he said that there is hardly any doubt that *exorata* is the male of *æqualis*. Dr. Horn's description of *exorata* fits equally well *æqualis* except in some sexual differences.

In the discussion which followed Mr. Joutel stated that he had recorded in this JOURNAL the capture of the true queen of the white ant several years ago.

Mr. Hugo Pfordte made some interesting remarks on collecting butterflies in Peru, S. Am. He exhibited a number of colored reproductions made by his father, Mr. Otto Pfordte, from the material obtained in South America.

Mr. Joutel exhibited a live nymph of the preying mantis (*Tenodero sinensis*) which he had reared in his yard from eggs sent to him from Philadelphia by Mr. P. Laurent. Mr. Joutel stated that he had placed a number of the egg masses of this species in the Fort Lee district with the hope that they would survive as they have at Phiadelphia.

MEETING OF OCTOBER 21, 1902.

A regular meeting of the society was held at the residence of Mr. L. H. Joutel, No. 164 East 117th Street. President C. F. Groth in the chair with sixteen members and two visitors present.

Mr. Watson proposed as an active member Mr. Chas. Meyers, 993 Boston Road, City.

In a communication read by the Secretary Mr. Beutenmüller presented a number of his entomological writings to the Society.

Moved by Dr. Love and duly seconded that the thanks of the society be extended to Mr. Beutenmüller for the papers and books received. Carried.

Dr. A. S. Packard made a few remarks concerning the progress that was being made by him in the revision of certain groups of the Bombycine moths. He stated some interesting facts about the distribution of certain genera which occurred in South America and also in Africa. The evidence seemed to show that there might have existed some sort of a land communication between the two countries at one time.

Mr. Leng spoke of the "Local Races of Cicindela" and exhibited specimens of C. rugifrons from Massachusetts, from Long Island and from the Pine Barrens of New Jersey; each form presented recognizable characteristics resulting from the isolation of its abode and consequent inbreeding over a large period. While the localities represented are not widely separated in respect of miles, and the distance would not preclude communication among insects which fly or are carried by wind storms or floods, the separation is complete for insects like the Cicindelidae, which are restricted to a limited suitable area and whose larvæ burrow in the sand while the imagines seek shelter as soon as the weather becomes even cloudy. Specimens of C. unicolor, also exhibited, from North Carolina and from Louisiana showed even more marked differences, as might be expected from the greater distance involved. In the case of C.

6-guttata specimens were shown from Louisiana and New York and the differences were evident. In this species the local races have already received names as exemplified in harrisii and violacea.

Specimens of *C. lecontei* were shown from Iowa and from Canada and served to enforce the argument, viz: that in *Cicindela* each described species having any extended range consists of a group of closely related races recognizable even when only moderately removed geographically and remarkably different when the geographical separation is considerable.

Mr. Davis stated that while in the pine barrens at Lakehurst, N. J., Mr. Leng and himself saw many specimens of *Hemileuca maia* flying over the scrub-oak, etc., on the mornings of October 18 and 19. None was noticed in the afternoon. As the moths flew rapidly they were exceedingly difficult to capture.

Mr. Davis also exhibited two mature specimens of the Japanese mantis (*Tenodero sinensis*) which were raised in his garden at New Brighton, Staten Island, from eggs presented to him by Mr. P. Laurent, of Philadelphia. He stated that the insects had lately been fed on raw meat.

Mr. Doll recorded the fact that while in the Adirondack Mountains the past summer he had collected and since reared to the pupa stage what is undoubtedly a new variety and possibly a new species of moth, judging from the peculiarities of the caterpillar. The larva is quite similar to *C. imperialis*.

Mr. Joutel exhibited a *Hydracia* moth which he had reared from the caterpillar. Mr. Bird pronounced it to be *H. appassionata*, a very rare moth, of which the type is in the British Museum.

On the invitation of Mr. Leng, Dr. Love moved that the next meeting of the society be held at the residence of Mr. Chas. W. Leng, 119 Columbia street, West New Brighton, S. I., on the afternoon of November 4.

Society adjourned.

MEETING OF NOVEMBER 4, 1902.

An informal meeting of the society was held at the residence of Mr. Chas. Leng, 119 Columbia street, West New Brighton, Staten Island, at 2.30 P. M.

A short business session was held with President C. F. Groth in the chair. Ten members and three visitors present.

Chas. Meyers, 993 Boston Road, was elected an active member of the society.

A communication from Prof. J. B. Smith was read in reference to giving us a lecture on "Mosquitoes, Their Life-History and Habits."

Dr. Love moved that the thanks of the society be extended to Professor Smith and that the secretary and president arrange for the museum hall, dates, etc., with the museum authorities.

Mr. Leng exhibited under the microscope a specimen of *Stenus* sp. received by Mr. Luetkins from Texas that showed the ligula much extended after death. The reason for this protrusion of the ligula is not known and it seems to have been rarely noticed. Mr. Casey remarks in one of his papers that it occurred in only three specimens out of 3,000 that had come under his observation. This peculiarity has not been recorded as occurring in any other Colcoptera so far as known.

Mr. Davis exhibited a live specimen of Hydrophilus ovatus, which is quite rare in this locality, collected at Mariner's Harbor, Staten Island.

Society adjourned to partake of an excellent luncheon and inspect Mr. Leng's collection of Coleoptera, which is particularly rich in Cicindelidæ and Coccinellidæ.

MEETING OF NOVEMBER 18, 1902.

A regular meeting of the New York Entomological Society was held at the American Museum of Natural History. President C. F. Groth presided, with thirteen members present.

Mr. Charles Meyers proposed as active members: Mr. C. P. Benedict, Manor Road, West New Brighton, and Mr. Charles E. Snyder, 2140 Prospect Avenue, Bronx Park, City.

Mr. Leng moved that a committee of five be appointed by the president to solicit contributions of money and manuscript for the purpose of publishing a Handbook of Coleoptera of Northeast America. Carried.

Mr. Watson recorded the capture of four specimens of *Monoleuca semifascia* at South Lakewood, N. J., on July 11, 1902. Being attracted by the lights they were captured on the screen door. This species is extremely rare in this locality as only one previous record of its capture has been found and that at Morris Plains, N. J.

Mr. Watson also made some remarks "On the Larvæ of Thecla titus Fabr." He stated that the butterfly is single-brooded, quite generally distributed, and locally common about New York city. It is found on the wing from the middle of June to the middle of July. The larvæ are slug-shaped and of a general green color, pinkish at either extremity. They are about 34 of an inch long when full grown. He found the larvæ full grown on May 24, 1902, at Van Cortlandt Park feeding on wild cherry. The larvæ are night feeders, and he found them during the day hiding on the stems of small plants, or in most cases, buried an inch or two beneath the surface of the ground. They were sometimes found just above the surface but covered with dirt, etc., which had been piled up by ants. The larvæ always had a few ants crawling about them, which feed on the juices which exude from the caterpillars. Sometimes the ants were so numerous as to completely cover the caterpillars. It was a very easy matter to locate the caterpillars by looking around the base of the wild cherry for the ant workings. When ant workings were missing no larvæ were found.

Mr. Joutel stated that he had found the larvæ of *Theela acadica* at Greenwood Lake, and that while some of the larvæ were in hiding at the base of the stems during the day, there were some of all ages feeding on the leaves, so that it cannot be called a nocturnal feeder. The ants take great care of the larvæ, and as Mr. Watson remarked of the larvæ of *Theela titus*, feed on the exudations of the caterpillar. It is still a question in what stage the insect winters, as what were undoubtedly eggs of this species were found on the leaves by Mr. Watson and himself. All of the larvæ pupated and emerged at the same season, but he had no opportunity to visit the locality later to look for a second brood.

Mr. Barber exhibited a collection of Coleoptera made at Cold Spring Harbor, Long Island, during the past summer, and made some remarks about the excellency of the locality as a collecting ground.

The president appointed the following committee of five to secure contributions for the Handbook of Coleoptera: Messrs. Leng, Davis, Joutel, Love and Schaeffer.